

PROCEEDINGS OF THE ROYAL ENTOMOLOGICAL SOCIETY OF LONDON

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ORDINARY MEETING

WEDNESDAY, 7TH SEPTEMBER, 1949, at 5.30 p.m.

AGENDA

1. Confirmation of the Proceedings of the Ordinary Meeting held on 6th July, 1949.
2. Recommendations of candidates for Fellowship.
3. Announcement of election of new Fellows.
4. Additions to the Library.

Presented.

- Barnes, H. F. *Gall midges of economic importance*. Vol. 3, *Gall midges of fruit*. Vol. 4, *Gall midges of ornamental plants and shrubs*. 8vo. London. 1948. [The Publishers.]
- Edwards, J. Gordon. *Coleoptera or beetles east of the Great Plains*. 4to. Ann Arbor, Michigan. 1949. [The Author.]
- Ford, L. T. *A guide to the smaller British Lepidoptera*. 8vo. London. 1949. [South London Entomological Society.]
- Licent, E. *Recherches d'anatomie et de physiologie comparées sur le tube digestif des Homoptères supérieurs*. 8vo. Liege. 1912. [The Author.]
- Longfield, C. *The dragonflies of the British Isles*. 2nd edition. 8vo. London. 1949. [The Publishers.]
- Munro, H. K. *African TRYPETIDAE (Diptera)*. [Memoir No. 1 of the Entomological Society of Southern Africa.] 8vo. Pretoria. 1947. [The Author.]
- Peterson, Alvah. *Larvae of insects. Part I, Lepidoptera and plant infesting Hymenoptera*. 4to. Columbus, Ohio. 1948. [The Author.]
- Pruthi, H. S. *Need for fundamental research on Insects in India*. 4to. New Delhi. 1949. [Entomological Society of India.]
- Temple, Vere. *British Butterflies*. 8vo. London. 1949. [The Publishers.]

Purchased.

- Balachowsky, A. *Les cochenilles de France, d'Europe, du nord de l'Afrique et du Bassin Méditerranéen*. 8vo. Paris. 1948.

- Blackwelder, R. E., and R. M. *Fifth Supplement to the Leng Catalogue of Coleoptera of America, north of Mexico*. 4to. Mt. Vernon, N.Y. 1948.
- Gruenberg, Karl. *Die blutsaugenden Dipteren*. 8vo. Jena. 1907.
- Herbulot, Claude. *Nouvel Atlas d'Entomologie*, No. 6. *Atlas des Lépidoptères de France, Belgique, Suisse*. III. *Heterocères (fin)*. 8vo. Paris. 1949.
- Janse, A. J. T. *The moths of South Africa*. Vol. IV, Pt. 3. NEPTICULIDAE. 8vo. Pretoria. 1948.
- Jeannel, R. *Faune de l'Empire français X. Coléoptères Carabiques de la région Malgache*. (2^{me} partie). 8vo. Paris. 1948.
- Kielsen, F. C. *Icones insectorum*. 8vo. Hafniae. 1835.
- Mimeur, J. M. *Encyclopédie entomologique (A)* 24. *Contribution à l'étude des Zoocécidies du Maroc*. 8vo. Paris. 1949.
- Nuttall, G. H. F., Warburton, C., and Robinson, L. E. *Ticks: a monograph of the Ixodoidea*. Pt. 4—The genus *Amblyomma*, by L. E. Robinson. 8vo. London. 1926.
- Peterson, Alvah. *A manual of entomological equipment and methods*. Pts. I and II. 5th edition. 4to. Ann Arbor, Michigan. 1947.
- Porta, Antonio. *Fauna Coleopterorum Italica*. Vols. 4, 5, and *Supplementum*. 4to. Piacenza. 1932-4.
- Villiers, André. *Faune de l'Empire français IX. Hémiptères réduviides de l'Afrique noire*. 8vo. Paris. 1948.

In addition separates have been presented by Major P. F. Mattingly, Mr. H. E. Box, Union Internationale des Sciences Biologiques, Prof. P. A. Buxton, Mr. J. E. Marson, Signor Carlo Taccani, Dr. Waloff, the Commonwealth Institute of Entomology, the Royal Society, the Rev. Prof. L. W. Grensted, the American Entomological Society, Mr. J. T. Salmon, Mr. A. P. G. Michelmore, the Anti-Locust Research Centre, Dr. T. A. F. Jaczewski and Mr. N. C. E. Miller.

5. Admission of Fellows.
6. Papers accepted for publication in the *Transactions*.
7. Exhibits.

Fellows are particularly requested to bring suitable exhibits to the Meeting even though it may not be possible to announce their intention to do so beforehand.

Note.—To avoid congestion in the Library and to enable exhibits to be displayed to greater advantage, a table has been placed in the meeting room for this purpose. Fellows are asked to place their exhibits on this table, with a suitable explanatory note, as soon as possible on the afternoon of the meeting, so that they are available for inspection there before the meeting opens.

8. Communications.

Dr. W. J. Hall.

Sudden Death Disease of Cloves in Zanzibar.

[ABSTRACT]

Cloves constitute between 60 and 70 per cent. of the total domestic exports of the Zanzibar Protectorate, which is the largest producer of this commodity in the world.

In the past few years a disease known as Sudden Death has devastated the plantations on Zanzibar Island and numerous scattered outbreaks, that are spreading rapidly, have broken out on Pemba Island. The nature of the disease and the rate of spread will be discussed.

The disease is not new and periodic outbreaks of what is believed to have been the same disease have occurred in the past. It has been attributed to over 30 different causes, but the present theory is that it is probably due to a virus disease although no definite proof of this has been secured as yet.

On the assumption that the disease is caused by a virus, a species of *Saissetia*, probably new to science, is under suspicion as the vector. The clove tree is remarkably free from insect pests and the *Saissetia* was the only insect species found generally distributed in the plantations; it was invariably associated with the tree nesting ant *Oecophylla longinoda* (Latr.). It is difficult to believe that this association is not bound up in some way with the spread of the disease. The evidence supporting the virus theory, with the *Saissetia* as the possible vector, will be discussed.

It is imperative that some attempt to check the spread of the disease on Pemba should be made at the earliest moment if the whole economy of the Protectorate is not to be endangered. A campaign to this end is to be commenced next January and will be described; it will be based on insecticidal treatment coupled with the felling of suspect trees in the vicinity of the outbreaks.

TEA will be served in the Library before the meeting.

A card index of Fellows' addresses arranged on a geographical basis is now available for the use of Fellows in the Society's Rooms. Addresses in Great Britain are grouped under counties: elsewhere under Dominions, Colonies, Foreign States, etc.

ADMISSION OF FELLOWS

Any Fellow who has not been formally admitted to the Society under Chapter XIV, Section 4 of the Bye-laws and attends the meeting on 7th September, 1949, is requested to inform the Secretary before 5.15 p.m. on that date.

PROCEEDINGS OF THE ORDINARY MEETING HELD ON 6TH JULY, 1949.

Dr. V. B. Wigglesworth, F.R.S., President, in the Chair.

Present, 65 Fellows and 27 Visitors.

The minutes of the Ordinary Meeting held on 1st June, 1949, were confirmed and signed by the President.

The President announced the death of Professor F. Silvestri, elected an Honorary Fellow of the Society in 1931, and of E. E. Green, elected a Fellow in 1891, and President in 1923-24.

The names of the following candidates for election were read for the first time: F. M. J. Carpentier, R. Levi-Castillo, E. J. Ebeyer Slythe and I. Thomas.

For the second time: C. H. Hattingh, F. C. Hatwell, S. N. A. Jacobs, and I. Lansbury.

The Secretary read the names of the following newly elected Fellows of the Society: J. E. H. Blackie, M.A., The Bell House, Alconbury, Hunts; V. Dirsh, D.Sc., Anti-Locust Research Centre, The British Museum (Natural History), London, S.W.7; P. G. Fenemore, 55, Florence Road, Brighton, 6, Sussex; Soong Min Kong, B.Sc., Department of Fisheries, Penang, Malaya; B. R. Laurence, 31, Sherwood Road, Luton, Beds; D. Leston, F.Z.S., 6, Frognal Rise, London, N.W.3; R. C. H. Sweeney, 11, Normanton Road, South Croydon, Surrey; J. D. Tickle, Seacroft, Newby Bridge Road, Newby, Scarborough, Yorks.; K. Tod, Wellbank, By Dundee, Angus, Scotland; Prof. R. L. Usinger, B.S., Ph.D., Division of Entomology and Parasitology, University of California, Berkeley, California, U.S.A.; A. R. Waterston, British Middle East Office, 10, Sharia Tolubat, Cairo, Egypt.

Thanks were voted to donors of gifts to the Library since the last meeting.

Mr. R. Phillips Dales, Mr. H. E. Goto, Mr. F. H. Latham, Mrs. M. J. Morgan, and Mr. N. C. Pant signed the Obligation Book and were admitted Fellows of the Society.

The meeting took the form of a series of papers, read by members of the staff of the Anti-Locust Research Centre, on the locust problem and the various lines of investigation now being followed, brief details of which appeared on page 22.

The President, Dr. C. B. Williams, Dr. J. S. Kennedy, Professor G. C. Varley, Dr. O. W. Richards, and Miss P. E. Ellis, a visitor, took part in the subsequent discussion.

N. D. RILEY, *Honorary Secretary*.

The next meeting will be held on 5th October, at 5.30 p.m.

Correction: Page 23, line 34, delete "Communicated by Dr. T. Jaczewski" and substitute "Communicated by the Honorary Secretary."—N.D.R.